REMARKS

The Title of the Invention has been amended. Claims 1-34 have been cancelled. Claims 35 – 43 remain in the application. Two paragraphs of the specification have been amended to correct informalities objected to by the Examiner in the parent application. The changes to the specification are noted in the attached appendix. New drawings are being submitted for approval. In the parent application, the Examiner indicated that Fig. 1 should be designated to depict prior art. Fig. 1 has been updated to reflect that it is prior art. Examination and consideration of the application, as amended, is hereby requested.

Respectfully Submitted,

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APPENDIX

Page 11, line 20: Please substitute the following paragraph:

Fig. 6A is a partial cross-sectional diagram of one embodiment of the invention derived from the block diagram shown in Fig. 2. In this embodiment of a print cartridge 200, two valves are used to provide a staged flow of fluid into the local reservoir 96. The print cartridge 200 is made up of a crown 94, a base 92, and a back-pressure regulator 100. The base 92 has a local reservoir 96, a fluid screen 98 and a printhead 90. The screen 98 filters out unwanted particles from the fluid to prevent the printhead 90 from clogging. The crown [92]94 has a fluid inlet 70, an inlet reservoir 72, an orifice of first regulator valve 74, an orifice of second regulator valve 76, and back-pressure regulator 100. Back-pressure regulator 100 is made up of an air bag 88 with an inside that is vented to the atmosphere outside of print cartridge 200 through air vent 80 and air plug 78. Air bag 88 is allowed to expand or contract in response to the pressure within print cartridge 200. As air bag 88 expands, force is exerted on a first moment arm 102 and a second moment arm 104. The combination of the air bag 88, spring 82, and the moment arms act to form the pressure sensor 32 previously described. The air bag 88 is light weight, flexible, deformable, and non-elastic. The air bag 88 is preferably fabricated from a thin high barrier based film into four adjacent pockets to increase the contact of the air bag 88 with the moment arms to create a force. This force is counter balanced with a force exerted by spring 82 which is connected to the first moment arm 102 and the second moment arm 104. To apply different force levels on the moment arms, each moment arm has a moment contact area at unequal distances from pivot points on the respective moment arm. The first moment arm 102 has a first moment contact area 106 which is as far distant from the first pivot point 84 as possible. The second moment arm 104 has a second moment contact area [104]108 closer to the second pivot point 86 than the first moment contact area 106 is to the first pivot point 84. The first moment arm 102 forms a valve seat of the first regulator valve 74. The second moment arm forms a valve seat of the second regulator valve 76. The valve seat is preferably formed from a silicon elastomer.

Page 12 , line 13: Please replace the following paragraph:

The print cartridge 200 of Fig. 6A is functionally equivalent to the print cartridge 14 shown in Fig. 2. The air vent 80, air plug 78, air bag 88, spring 82, first moment contact area 106, and second moment contact area [104]108 are functionally equivalent to the pressure sensor 32 of Fig. 2. The inlet reservoir 72 is functionally equivalent to the inlet reservoir 18 shown in Fig. 2. The local reservoir 96 is functionally equivalent to the local reservoir 34 shown in Fig. 2. The first regulator valve 74, controlled by the pressure sensor through the use of first moment arm 102 and first pivot point 84, is functionally equivalent to the first regulator valve 40 of Fig. 2. The second regulator valve 76, controlled by the pressure sensor through the use of second moment arm 104 and second pivot point 86, is functionally equivalent to the second regulator valve 38 of Fig. 2. The printhead 90 functionally equivalent to the printhead 36 shown in Fig. 2.